Index

A

Activities, selecting and developing, 115-135
Alberta Plan, 43
American Industry Project, 42, 95
Arranging lab seating and equipment, 150-157
Artificial intelligence, 183-184
Asimov, Isaac, 178, 179, 188
Audio discs, 35

B

Behaviorist theory, 120, 121
Bolton, Dale L., 171
Brown, Ryan, 139-163
Bruner, J. S., 124
Brusic, Sharon A., 1-19
Business, communication systems in, 20-36

C

CAI (computer-assisted instruction), 145-146
CD-A, 35
CIP, 98
Cognitive development, and learning readiness, 125-126
Communication, process of, 8-10, 64-65
Communication industries, coursework in, 73-78
Communication systems
- in business, 20-36
- components of, 10-11
- deregulation of, 5
- electronic, coursework in, 71-73
- and environment, 16-17
- in government, 20-36
- graphic, coursework in, 68-71
- in home, 4-5, 6
- implications of, 13-17
- in industry, 16, 20-36
- for insurance companies, 26
- integration of, 3-4, 28-29, 30-36, 185
- negative effects of, 13, 14, 16-17
- as political tool, 14-15
- and privacy, 14
- standardization of, 4
- visual, coursework in, 68-71

Communication technology programs, developing, 85-89
Compact audio laser discs, 35
Computer-assisted instruction, 145-146
Computers and artificial intelligence, 183-184
- and CAI, 145-146
- in corporate and government offices, 29-34
- impact of, 3-4, 178-179
- and instruction, 145-147
- learning centers for, 146-147
- microcomputer LANs, 31-32
- and service bureaus, 185

Conceptual models, 101-104, 106-108
Corporate communication systems, 16, 20-36
Creative problem solving, need for, 161

Index

A

Activities, selecting and developing, 115-135
Alberta Plan, 43
American Industry Project, 42, 95
Arranging lab seating and equipment, 150-157
Artificial intelligence, 183-184
Asimov, Isaac, 178, 179, 188
Audio discs, 35

B

Behaviorist theory, 120, 121
Bolton, Dale L., 171
Brown, Ryan, 139-163
Bruner, J. S., 124
Brusic, Sharon A., 1-19
Business, communication systems in, 20-36

C

CAI (computer-assisted instruction), 145-146
CD-A, 35
CIP, 98
Cognitive development, and learning readiness, 125-126
Communication, process of, 8-10, 64-65
Communication industries, coursework in, 73-78
Communication systems
- in business, 20-36
- components of, 10-11
- deregulation of, 5
- electronic, coursework in, 71-73
- and environment, 16-17
- in government, 20-36
- graphic, coursework in, 68-71
- in home, 4-5, 6
- implications of, 13-17
- in industry, 16, 20-36
- for insurance companies, 26
- integration of, 3-4, 28-29, 30-36, 185
- negative effects of, 13, 14, 16-17
- as political tool, 14-15
- and privacy, 14
- standardization of, 4
- visual, coursework in, 68-71

Communication technology programs, developing, 85-89
Compact audio laser discs, 35
Computer-assisted instruction, 145-146
Computers and artificial intelligence, 183-184
- and CAI, 145-146
- in corporate and government offices, 29-34
- impact of, 3-4, 178-179
- and instruction, 145-147
- learning centers for, 146-147
- microcomputer LANs, 31-32
- and service bureaus, 185

Conceptual models, 101-104, 106-108
Corporate communication systems, 16, 20-36
Creative problem solving, need for, 161

Curriculum
activities in, 115-135
designs for, 126-128
developing, 85-89, 106-111
for educating teachers, 92-114
in elementary schools, 50-60, 117, 190-191, 192
future needs in, 188-189
generalized, 81-84
in high schools, 62-89, 117, 190-191
for mass communication course, 73-77
in middle schools, 50-60, 82, 117, 190-191
models for. *See* Models
student enterprise project in, 76-77
Curriculum implementation project, 98

D

Databases, 28-29, 32-36
Deregulation, 5
Designs, curriculum, 126-128. *See also* Models; Program
Developing a new communication program, 85-89
Development, and learning readiness, 125-126
Discs
audio, 35
optical, 32-33, 35
Documentation, technical, for corporations, 24-25
Domains of learning, 118-120
Dugger, William E., Jr., 165-177

E

Education, technology in
elementary schools, 50-60, 117, 190-191, 192
evaluating, 165-175
in future, 187-190
goals of, 116-118
in high schools, 62-89, 117, 190-191
history of, 38-47
in middle schools, 50-60, 117, 190-191
for teachers, 44-45, 92-114
Electromagnetic spectrum, 72 (illus.)
Electronic communications, coursework in, 71-73
Electronic media delivery, 32-36
Elementary school, technology education in, 50-60, 117, 190-191, 192
Employment, and technology, 180-181
Enterprise, student, as part of curriculum, 76-77
Environment, communication systems' effects on, 16-17
Environment, learning, establishing, 139-163
Equipment, technology
arranging, 148, 149, 150-157
selecting, 158-159
Evaluating the learning process, 165-175

F

Face, Wesley, 42
Facsimile transmission, 2-3, 16

Faculty psychology theory, 120, 121
Fax transmissions, 2-3, 16
Financial communications, 25
Flug, Eugene, 42
Future of communication technology education, 187-190
Futuring Project, New York, 46

G

Galaxy Plan for Career Preparation, 42-43
Gandy, Oscar H., 14, 15
Georgia Plan for Industrial Arts, 42
Gestalt theory, 120, 121
Goals of technology education, 116-118
Government, communications systems in, 20-36
Graphic communication, coursework in, 68-71
GTE Spacenet, 184-185

H

Hackett, Donald, 42
Hales, J. A., 39, 45
HDTV, 2, 6, 185-186
Hendricks, Robert, 92-114
High definition television, 2, 6, 185-186
High school, technology education in, 62-89, 117, 190-191
Hilgard, E. R., 122, 125
Home, communications systems in, 4-5, 6

I

IBM "Advanced Technology Classroom," 182
Idaho, MESH program in, 192
Illinois Plan, 45
Implementing Technology Education, 46
Independent study, lab areas for, 147-148
Individualized instruction, lab areas for, 147-148
Industries, communication, coursework in, 73-78
Industry communication, the, coursework in, 73-78
communication systems in, 15-16, 20-36
Industry and Technology Education, 46
Information, electronic delivery of, 2-3, 16, 32-36
Information employees, 180-181
Information processing techniques, basing instruction on, 81-84
Instruction
computer-assisted, 145-146
evaluating, 165-175
individualized, 147-148
Instructional program, developing a new, 85-89
Insurance companies, communication systems in, 26
Integrated networks, 3-4, 30-36, 185
Intelligence, artificial, 183-184
Interdisciplinary communication programs, 77-81

J

Jackson's Mill Curriculum Theory, 39, 45, 46, 96-98
Jones, Ronald E., 38-49

L

Laboratories, establishing, 139-143, 146-159
LANs, 31-32
Laser audio discs, 35
Learning
  domains of, 118-120
  and personality types, 124-125
  principles of, 122
  readiness for, 125-126
Learning centers, computer, 146-147
Learning environment, establishing, 139-163
Learning process, evaluating, 165-175
Leisure time, and communication technology, 4, 7
Liedtke, Jane A., 178-195
Lighting, in lab, 148, 149

M

Maley, Donald, 43, 44, 58
Maryland Plan, 43, 44, 128
Mass communication industry, coursework in, 73-77
Mathematical Theory of Communication, The, 64-65
MESH program, 192
Microcomputer LANs, 31-32
Middle school, technology education in, 50-60, 82, 117, 190-191
Mission 21, 193
Missouri, technology program in, 52
Model, of communication process, 8-10, 64-65
Models, technology education
  based on information processing techniques, 81-84
  conceptual, 101-104, 106-108
  early, 42-44
  for elementary schools, 50-60
  evaluation, 171, 172-174
  function of, 94
  Futuring Project, 46
  in high school, 62-89
  in Idaho, 192
  Illinois Plan, 45
  Jackson's Mill, 39, 45, 46, 96-98
  landmark, 45-47
  Maryland Plan, 43, 44, 128
  MESH program, 192
  in middle schools, 50-60
  in Missouri, 52
  New York Futuring Project, 46
  in Ohio, 52-53, 193
  in Pennsylvania, 52
  selecting a, 99-101
  for teachers, educating, 92-113
  textbook as a, 99-100
  in Virginia, 172
  in West Virginia, 51-52
Multimedia technologies, 181-182
Murphy, Brian, 7
Myers, Isabel Briggs, 124-125

N

NASA, and Mission 21, 193
Negative effects of communications systems, 6, 13, 14, 16-17
Networking, 3, 30-32, 185
New York Futuring Project, 46
Noise, sources of, 9
Noise pollution, 17

O

Occupational, Vocational, and Technical Program, 43
Ohio, technology programs in, 52-53, 193
On-line databases, 32-36
Open space plan, in labs, 149, 151
Optical discs, 32-33, 35
Optical storage systems, 4
Orchestrated Systems Approach, 42
OVT program, 43

P

Paper consumption, 16-17
Pelley, Albert L., 165-166
Pennsylvania, technology programs in, 52
Personal communications systems, 4-5
Personality types, and learning, 124-125
Political implications of communications systems, 14-15
Principles of learning, 122
Privacy, and communication systems, 14
Problem solving, creative, 161
Processes, communication, 8-10
Processing techniques, basing instruction on, 81-84
Program, communications, developing a new, 85-89

R

Readiness for learning, 125-126
Research, and communication systems, 15-16
Resources, for activities, 134-135
Richter, Jerry, 95
Robb, Janet L., 38-49

S

Sanders, Mark E., 115-138
Satellite technology, 184-185
Savage, E., 193
Schmitt-Pelley study, 165-166
Science, and communication systems, 15-16
Searle, Dr. John, 183-184
Service bureaus, 185
Seymour, Richard D., 62-91
Shannon, Claude E., 8-9, 64-65
Shannon and Weaver model, 8-9, 64-65
Simmons, Charles E., 14, 15
Snyder, David, 180-181, 182
Snyder, J. F., 39, 45
Society communications systems' effects on, 13-14
computer's impact on, 178-179
Software, for corporate communications, 29-30
Spacenet, GTE, 184-185

Standardized communication systems, 4
Stealth, technology of, 186-187
Sterry, Leonard F., 92-114
Student enterprise, mock, 76-77
Surveillance systems, 15
Swyt, D. A., 193

T

Taxonomy, conceptual, 101-104, 106-111
Teachers, technology education for, 44-45, 92-114
Teaching, evaluating, 165-175
Technical documentation, corporate, 24-25
Technology education. *See* Education
Telecommunications, 32-36
Television
  high definition, 2, 6, 185-186
  negative effects of, 13
Textbooks, communications
  with activities, 134
  early, 46-47
  using for model, 99-100
Theories
  behaviorist, 120, 121
  faculty psychology, 120, 121
  Gestalt, 120, 121
  learning, 120-121, 124-125
  Jackson's Mill Curriculum Theory, 39, 45, 46, 96-98
  Mathematical Theory of Communication, 64-65
  personality and learning styles, 124-125
  putting into practice, 121-126
Thode, T., 192
Thomas, Lewis, 10
Trautman, Donna K., 50-61
Trends, technological, 3-5
Trocki, Frank, 20-37
Tyler, R. W., 123-124

U

USA Today, and satellites, 184

V

Videodiscs, 35
Videotex, 35-36
Virginia model, 172
Visual communication systems, coursework in, 68-71

W

Wakefield, Rowan A., 3-4
Warfare technology, 186-187
Warner, William, 94-95
Weaver, Warren, 8-9, 64-65
Wenk, Edward, Jr., 5, 12, 18
West Virginia Plan for Technology Education, 51-52

Y

Yoho, Lewis, 42

Z

Ziel, Henry, 43
Zuga, K. F., 126-128, 192